Fig.1

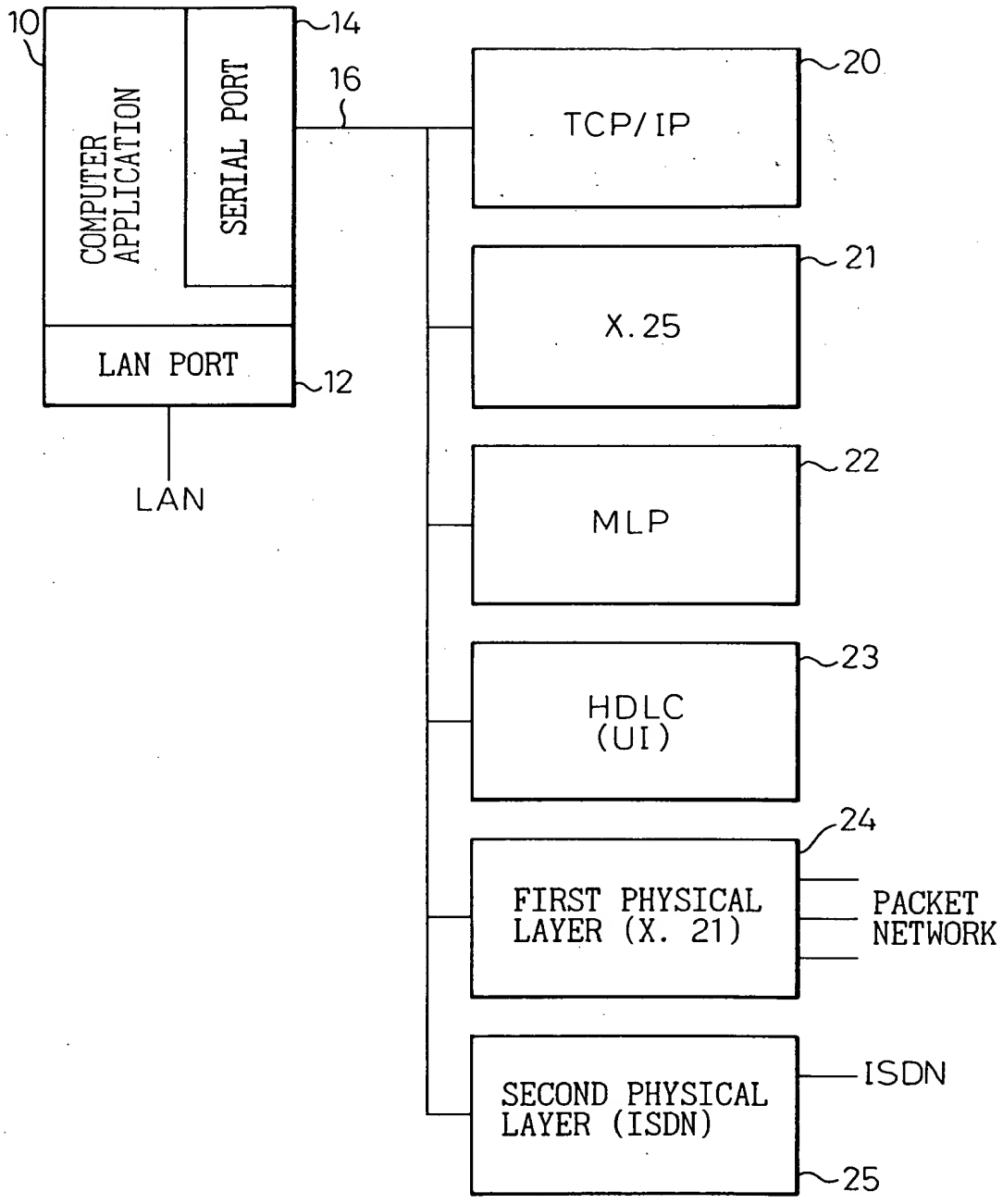

10
COMPUTER APPLICATION
SERIAL PORT
14
16
LAN PORT
12
LAN
TCP/IP
20
X.25
21
MLP
22
HDLC (UI)
23
FIRST PHYSICAL LAYER (X. 21)
24
PACKET NETWORK
SECOND PHYSICAL LAYER (ISDN)
ISDN
25

Fig.2

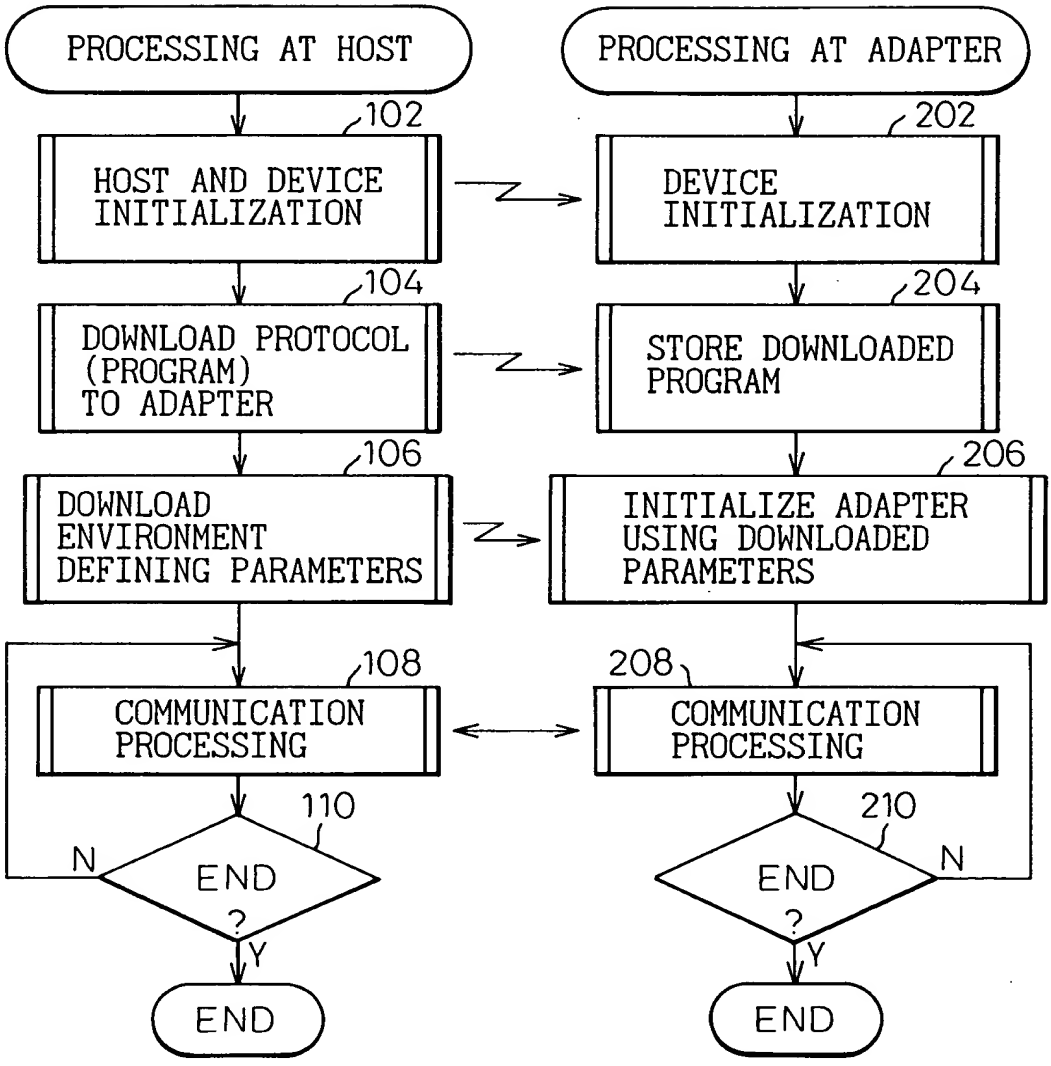

PROCESSING AT HOST
PROCESSING AT ADAPTER
102
HOST AND DEVICE INITIALIZATION
202
DEVICE INITIALIZATION
104
DOWNLOAD PROTOCOL (PROGRAM) TO ADAPTER
204
STORE DOWNLOADED PROGRAM
106
DOWNLOAD ENVIRONMENT DEFINING PARAMETERS
206
INITIALIZE ADAPTER USING DOWNLOADED PARAMETERS
108
COMMUNICATION PROCESSING
208
COMMUNICATION PROCESSING
110
END ?
N
Y
210
END ?
N
Y
END
END

Fig.3

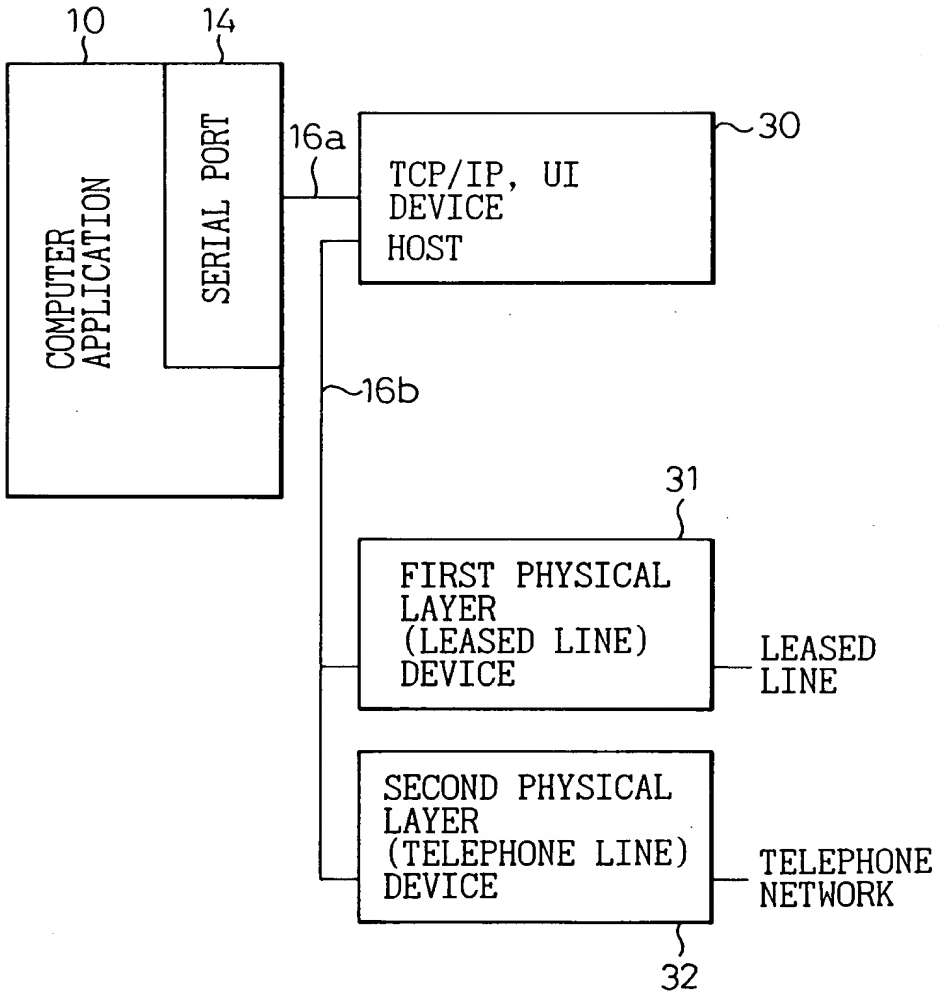

10
14
COMPUTER APPLICATION
SERIAL PORT
16a
TCP/IP, UI DEVICE HOST
30
16b
31
FIRST PHYSICAL LAYER (LEASED LINE) DEVICE
LEASED LINE
SECOND PHYSICAL LAYER (TELEPHONE LINE) DEVICE
TELEPHONE NETWORK
32

Fig.4

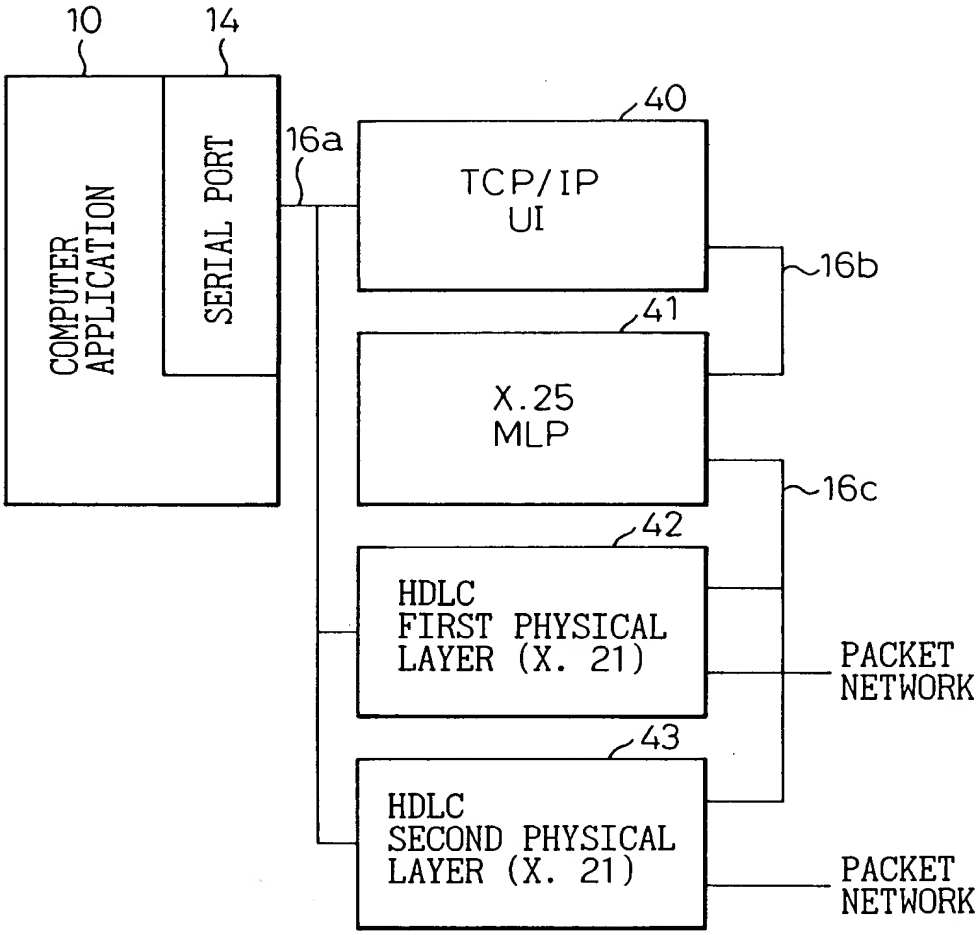

10
14
COMPUTER APPLICATION
SERIAL PORT
16a
40
TCP/IP UI
16b
41
X.25 MLP
16c
42
HDLC FIRST PHYSICAL LAYER (X. 21)
PACKET NETWORK
43
HDLC SECOND PHYSICAL LAYER (X. 21)
PACKET NETWORK

Fig.5

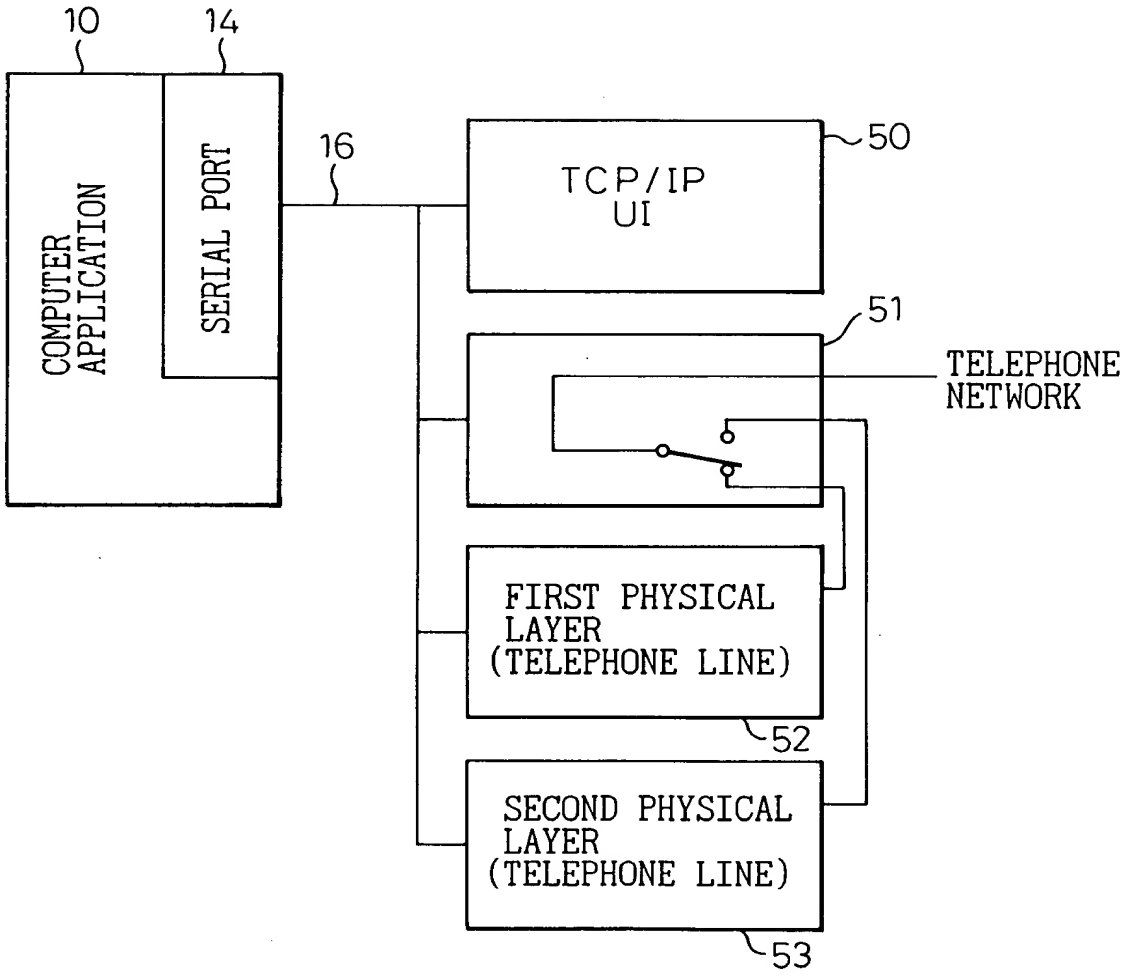

10
14
COMPUTER APPLICATION
SERIAL PORT
16
TCP/IP UI
50
51
TELEPHONE NETWORK
FIRST PHYSICAL LAYER (TELEPHONE LINE)
52
SECOND PHYSICAL LAYER (TELEPHONE LINE)
53

Fig.6

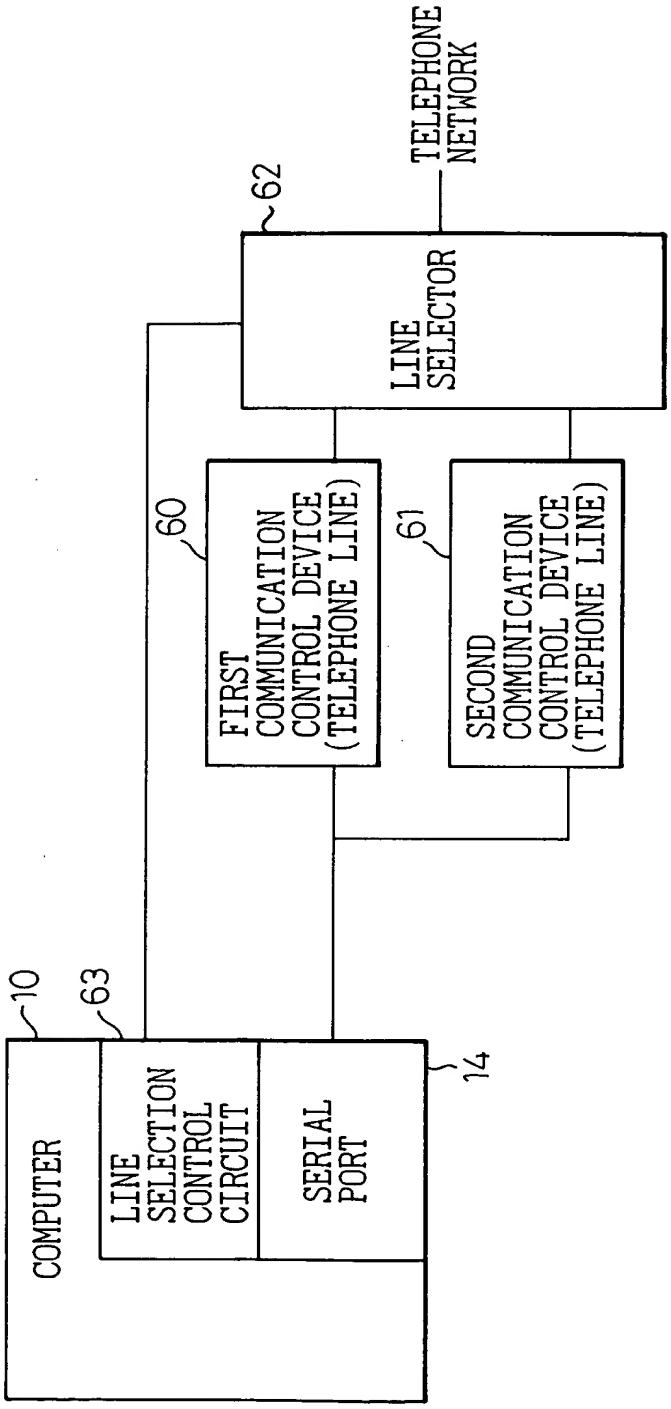

TELEPHONE NETWORK
62
LINE SELECTOR
60
FIRST COMMUNICATION CONTROL DEVICE (TELEPHONE LINE)
61
SECOND COMMUNICATION CONTROL DEVICE (TELEPHONE LINE)
10
63
COMPUTER
LINE SELECTION CONTROL CIRCUIT
SERIAL PORT
14

Fig.7

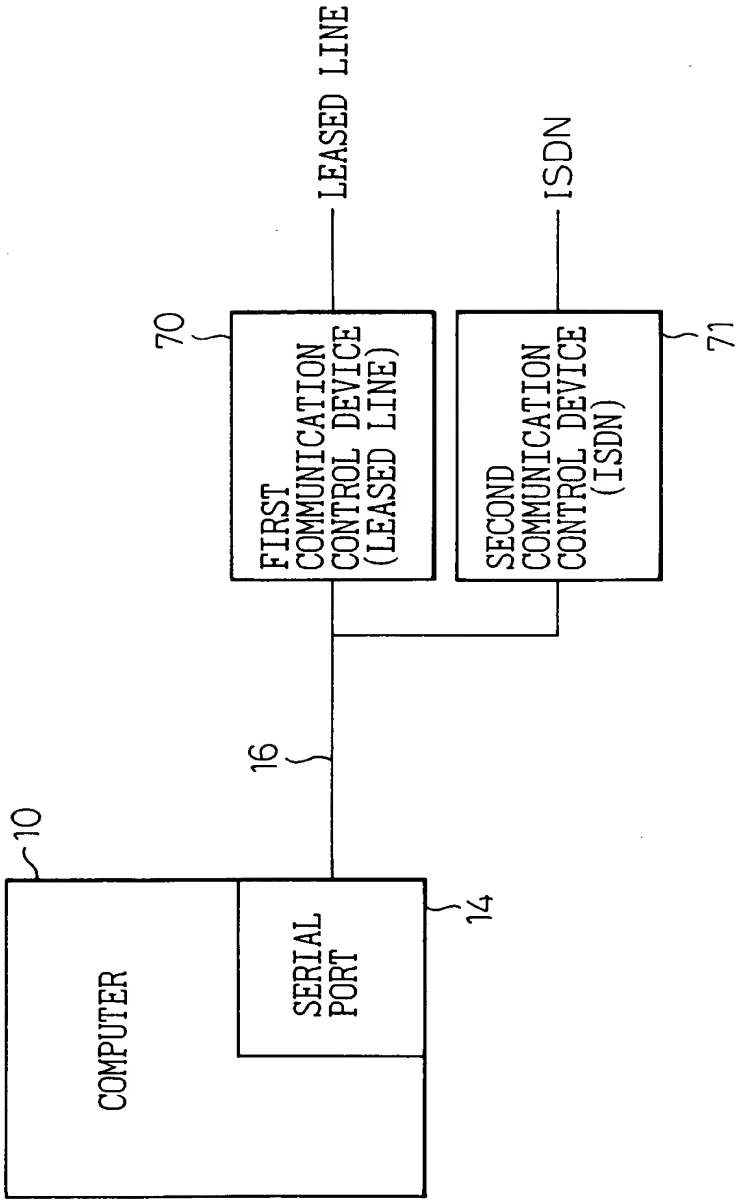
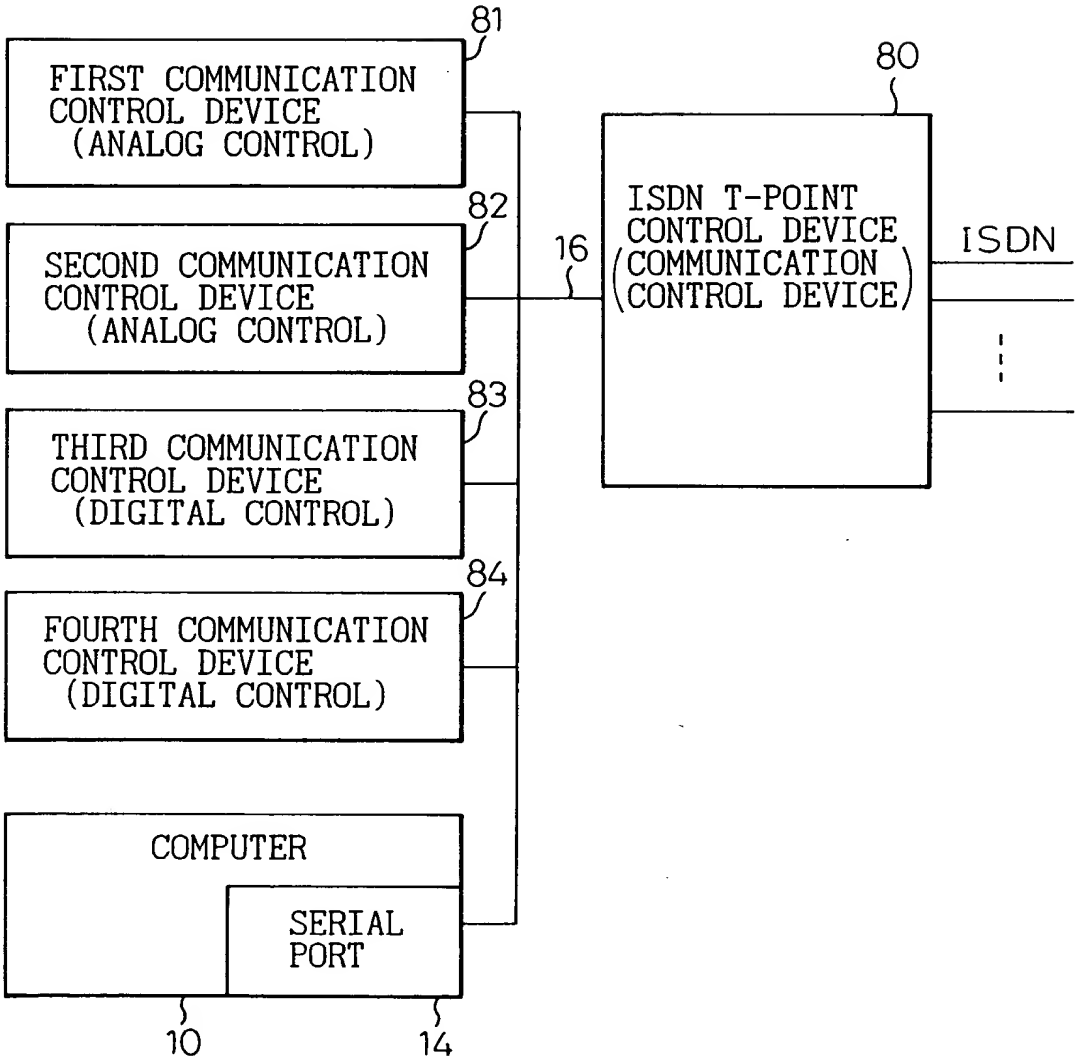

LEASED LINE
ISDN
70
FIRST COMMUNICATION CONTROL DEVICE (LEASED LINE)
SECOND COMMUNICATION CONTROL DEVICE (ISDN)
71
16
10
COMPUTER
SERIAL PORT
14

Fig.8


81
FIRST COMMUNICATION CONTROL DEVICE (ANALOG CONTROL)
82
SECOND COMMUNICATION CONTROL DEVICE (ANALOG CONTROL)
83
THIRD COMMUNICATION CONTROL DEVICE (DIGITAL CONTROL)
84
FOURTH COMMUNICATION CONTROL DEVICE (DIGITAL CONTROL)
COMPUTER
SERIAL PORT
10
14
16
80
ISDN T-POINT CONTROL DEVICE (COMMUNICATION CONTROL DEVICE)
ISDN